



TECHNICAL SERVICES DEPARTMENT

Engineering/Construction

PUBLIC WORKS – TECHNICAL SERVICES DEPT. – 550

EXPENDITURES BY CATEGORY:

	Actuals FY 2006	Actuals FY 2007	Estimated FY 2008	Budget FY 2009	% Var	Budget FY 2010	% Var
Salary and Benefits	2,029,921	2,010,544	1,975,662	2,542,839	29%	2,542,839	0%
Operating Expense	16,602	22,292	24,441	28,400	16%	28,400	0%
Capital Expenditures	-	-	-	-	-	-	-
Carryovers	11,279	11,424	4,311	-	-100%	-	0%
PROG EXPENDITURES TOTAL	2,057,802	2,044,260	2,004,414	2,571,239	28%	2,571,239	0%

FUNDING SOURCE SUMMARY

General Fund	2,057,802	2,044,260	2,004,414	2,571,239	28%	2,571,239	0%
PROG FUNDING SOURCE TOTAL	2,057,802	2,044,260	2,004,414	2,571,239	28%	2,571,239	0%
Authorized Full-time Equivalents	35	35	35	27	-23%	27	0%

PURPOSE:

To develop and implement projects that will expand and improve County infrastructure. The program achieves this purpose through the management of engineering design; construction of public works projects, including roadways, bridges, water, sewer, and drainage systems. Identify infrastructure projects necessary to meet the needs in developing areas of the County and program projects needed to sustain existing infrastructure systems. The program's primary function will be to plan, initiate, design, and construct infrastructure projects. The program has adopted a 'cradle-to-grave' concept whereby the project team stays with the project and manages its projects completely through the construction phase.

SERVICES PROVIDED:

Management of construction contracts, contract administration, design of projects, and coordination of professional engineering consultants' designs assures project compliance with environmental requirements and coordination of design and construction activities. The program also provides construction inspection to ensure construction is in compliance with design and specifications and that the quality of construction projects meets minimum county requirements. The inspection staff maintains project documentation in accordance with funding source requirements. Other services provided are materials testing of construction work, coordination of projects with utility companies, assistance in development of capital improvement plans, and engineering assistance to other County departments. The program has an emphasis on coordination with the public to ensure successful completion of projects.

PROGRAM HIGHLIGHTS AND MAJOR ACCOMPLISHMENTS:

- During the 2007-08 fiscal years, numerous significant projects were constructed or started construction as follows:
 - Isleta Boulevard Phase 2 Improvements
 - Southwest Valley Water System, Transmission Line Phase 1
 - Southwest Valley Water System, Distribution System Phase 2
 - Southwest Valley Water System, Transmission Line and Reservoir Phase 3
 - North Valley Area I and J Sanitary Sewer
 - Hartline Drainage

Two major construction projects were completed during 2007-2008 budget cycle; the projects are the Isleta Road Improvements Phase 2 and the South Valley Water System Transmission Line Phase 1. The South Valley Water System Transmission Line project was completed on schedule and within budget at \$13.5M; and the Isleta Boulevard Reconstruction Project, Phase 2 was completed on schedule and within budget at a construction cost of \$26.5M. Three major construction projects were started in 2007-2008; these projects consist of the Edith Boulevard Road Improvements, South Valley Water System Distribution Phase 2, and the North Valley Area I and J Sanitary Sewer project. The projects were bid at \$11,786,931 for Edith, \$10,553,673 for South Valley Distribution, and \$9,107,391 for the North Valley Area I and J. In addition to the major projects listed above, many local road projects provided an immediate positive impact to the residents throughout the County. Staff's use of the Construction Procedures Manual implemented in FY 01/02 continues to be successful in standardizing construction procedures.

Technical Services has continued to work with the Corps of Engineers (COE) and AMAFCA on the Southwest Valley Flood Reduction project. The project has been authorized by Congress in the 2008 WRDA bill for \$24.6 million. The COE, BC and AMAFCA are also working with the Bureau of Reclamation to receive a permit to discharge into the MRGCD drains. A project cooperation

- Maryetta Storm Drainage
- Lyon Boulevard Road Improvements
- Atrisco Road and Drainage Improvements
- El Porvenir Drainage
- Miscellaneous 2007 and 2008 Legislative Road Improvements
- 2007 and 2008 CAP, COOP, School Bus Road Improvements
- Edith Boulevard Road Improvements
- Edith/Montano Intersection Improvements
- Modesto Storm Drainage

agreement (PCA) will be signed with the COE and AMAFCA in 2008, construction should proceed in FY 2009 if construction funds are available from the Federal government.

The County is also working with the COE and AMAFCA on the Black Mesa Storm Drainage project. This project is funded through the SEC 593 authorization. The first Phase is scheduled to start construction by July of 2008; this phase consists of an outfall for three AMAFCA dams on the west mesa. This phase of the project will cost approximately \$3 million. The second phase of the project consists of upgrading the Los Padillas and Isleta drains to convey stormwater to a detention pond and a new or upgraded pump station located near Malpais Road and I-25. The pump station will discharge stormwater to the Rio Grande. The second phase of the project will begin design in 2008.

Technical Services is continuing to work with various State Legislators to fund major road and drainage projects as well as smaller residential road overlay or reconstruction projects.

The construction materials laboratory continues to provide materials testing and inspection services for County projects. The lab has been approved for both State and EPA projects. The lab personnel have been certified by the American Concrete Institute (ACI) and the statewide Technician Training and Certification Program (TTCP).

COUNTY GOAL: Bernalillo County will provide residents with safe, efficient well maintained County infrastructure and transportation networks.

DEPARTMENTAL OBJECTIVES:

FY09

- Improve customer service in the Design/Construction project area through meetings and solicitation of feedback.
 - Two public meetings will be scheduled for each major project. For minor projects, either one public meeting will be conducted or a project flyer will be distributed.
 - Measure: Compare number of residents in attendance per meeting.
 - Conduct a customer survey at the end of projects.
- Complete legislative projects prior to the next legislative session.
 - Construct and seek reimbursement for legislative-funded projects by the end of the calendar year in which the funding is appropriated.
 - Within one month of the publication of the list of projects funded by the legislature, a list of those projects that should be constructed within the same calendar year will be prepared. Certain projects, such as phased projects, studies, or major projects that the legislative funding accounts for a portion of the funding may not be completed within the same calendar year. Include the individual projects in the department schedule with the target of completing each applicable project and requesting reimbursement prior to the end of the calendar year.
- Improve capital project execution.
 - Negotiate basic engineering costs for engineering services contracts to the amounts projected from the ASCE fee curve.
 - Contract Negotiation Approach/ASCE's Guide for the Engagement of Engineering Services; Differences between NMDOT Blue Book and COA Specs; Construction Safety; etc.
 - Number of presentations made by the professional staff.
- Reduce fuel consumption by 20% from 2005 level. Measure: Report quarterly fuel usage.
- Compare negotiated fee to 100% of the projected fee from the ASCE fee curve.
 - Based on the construction estimate and anticipated schedule at the inception of design services, complete capital project "on time and within budget".
- Report percentage of projects that were completed "on time and within budget".
 - Develop engineering cost estimates at the end of the design phase and immediately prior to the bidding phase that are within 10% of the actual low bid received.
 - Report % deviation of the final engineer's estimate compared to the low bid amount.
- Improve engineering staff presentation skills.
 - Each staff engineer will develop, organize and conduct at least one training class with the required attendance of other in-house staff. Ideas for presentation.

FY10

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- Compare negotiated fee to 100% of the projected fee from the ASCE fee curve.
 - Based on the construction estimate and anticipated schedule at the inception of design services, complete capital project "on time and within budget". Measure: Report percentage of projects that were completed "on time and within budget".
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- Improve engineering staff presentation skills.
 - Each staff engineer will develop, organize and conduct at least one training class with the required attendance of other in-house staff. Ideas for presentation: Contract Negotiation Approach/ASCE's Guide for the Engagement of Engineering Services; Differences between NMDOT Blue Book and COA Specs; Construction Safety; etc.
 - Number of presentations made by the professional staff.
- Reduce fuel consumption by 20% from 2005 level. Measure: Report quarterly fuel usage.

Technical Services Department-Engineering/Construction

PERFORMANCE DATA:

Performance Measures	Actual FY 2006	Actual FY 2007	Estimated FY 2008	Target FY 2009	Target FY 2010
Design Contracts Completed	2	5	11	3	3
Engineering \$ Expended	2,857,443	2,345,924	2,500,000	1,500,000	1,500,000
Construction \$ Placed	24,864,508	32,400,767	24,000,000	30,000,000	32,000,000
Construction Projects Completed	16	14	15	15	15
Engineering Basic Services Fee – Based on the actual negotiated fee compared to 100% of the projected fee from the ASCE fee curve	-*	-*	100	100	100
Construction Project Performance – Based on the % of the total number of projects that were completed “on time and within budget”.	-*	-*	95	95	95
Project Construction Estimates – Based on the % deviation of the final engineer’s construction estimate compared to the low bid amount.	-*	1%	+/-10	+/-10	+/-10
Number of attendees at public meet- ings	50	50	40 – Large 15 - Small	40 – Large 15 - Small	40 – Large 15 - Small
Number of presentations by profes- sional staff	-*	1	8	8	8
Fuel consumption (gal. per month)	-*	855	684	684	684

* Performance Measure was not being recorded.



TECHNICAL SERVICES DEPARTMENT

Development Review Program

PURPOSE:

To review and approve new infrastructure developed by the private sector and public facilities and infrastructure such as roadways, utilities, park improvements, recreational trails, and trail head parking. This program's primary goals are to ensure that the County's infrastructure is enhanced through the construction of new projects and that quality customer service is provided to the development community. Mitigation of the adverse impacts that can accompany new construction and development is a top priority for program staff.

SERVICES PROVIDED:

The program also provides construction inspection to ensure construction is in compliance with design and specifications and that the quality of construction projects meets county requirements. The inspection staff ensures compliance with approved plans. Other services provided are engineering assistance to other County agencies and serving as County representative to various land use committees and other public agencies, such as BCC, CPC, CDRA, AMAFCA, and the ABCWUA. The program has an emphasis on coordination with the public to ensure successful completion of projects. Development review services include the review of proposed development for conformance with County ordinances and regulations, inspections of ongoing construction related to development, coordination of development related activities, and providing timely and helpful customer service.

PROGRAM HIGHLIGHTS AND MAJOR ACCOMPLISHMENTS:

- During the 2006-08 fiscal years Development Review accomplished the following tasks:
 - Provided review and comment on approximately 240 Commercial Building Permit requests.
 - Provided review and comment on approximately 1500 Residential Building Permit requests.
 - Provided review and comment on approximately 250 Zoning Administrative cases.
 - Provided review and comment on approximately 90 Special Use Permit requests.
 - Provided review and comment on approximately 30 Zone Change requests.
 - Provided review and comment on approximately 300 Minor Subdivision and Replat cases.
 - Provided review and comment on approximately 35 Major Subdivision cases.
 - Provided review and comment on approximately 95 sets of Construction Plans.
 - Provided review and comment on approximately 8 Annexation cases.
 - Provided review and comment on approximately 7 Special Reports.
 - Provided review and comment on approximately 250 Grading and Drainage Plans.
 - Issued and inspected approximately 2750 Access, Grading and Paving, Excavation and other permits
 - Issued and inspected approximately 50 Storm Water Pollution Prevention Plan (SWPPP) permits.
 - Provided review and comment on the proposed Bernalillo County Street Standards revision.
- Development Review staff analyzed each request to ensure conformance to all applicable policies, standards, ordinances, codes and laws. Staff coordinated the review and comment of cases and the issuance of permits with other appropriate City, County and State agencies to ensure unified, positive development within the unincorporated areas of Bernalillo County. Daily documented site visitation was conducted by qualified Development Review inspectors or other staff members to obtain pertinent measurements and photographs of existing conditions or constructed improvements and to meet with concerned County residents. In addition, staff routinely met with developers, agents, architects, engineers and other members of the community, both at the Public Works offices, in the field, or elsewhere to discuss their concerns regarding individual cases and permits, to answer specific and general questions regarding development and to provide directives regarding development requirements. Staff also addressed the concerns of the County Commissioners and County Manager's office by researching cases and providing information as requested.

Technical Services Department-Development Review Program

COUNTY GOAL: Bernalillo County will provide residents with safe, efficient well maintained County infrastructure and transportation networks.

DEPARTMENTAL OBJECTIVES:

During the 2008-10 fiscal years, Development Review staff will continue to seek improvement in addressing permit requests and case review. Efficiency, thoroughness and correctness of the each review process, permit process and inspection service will be made a subject of the regular Development Review staff meetings. These staff meetings will also be used to address such concerns as improving understanding of the KIVA data storage and tracking service, and the various standards, ordinances, and codes that provide guidelines for Development Re-

FY09

- Improve customer service in the Development Review area through prompt submittal review and conducting inspections. Because certain cases will require additional time for review and inspection as result of case complexity or other mitigating circumstances a percentage completion goal has been included and is shown in the Performance Data Table.
 - Complete building permit inspections within two (2) working days of request
 - Complete excavation permit inspections within four (4) working days of request
 - Review grading and drainage plans within five (5) working days of submittal
 - Review construction drawings within seven (7) working days of submittal
 - Objective: Complete building permit reviews within two (2) working days of receipt at Public Works
 - Objective: Work with the Zoning, Building, Planning, and Environmental Health department to identify and monitor procedural changes for implementation for both departments.
 - * Measure: Reports from the KIVA system will be reviewed quarterly to check the status of submittal reviews and inspections for development projects.
- Improve engineering staff presentation skills.
 - Each staff engineer will develop, organize and conduct at least one training class with the required attendance of other in-house staff. Ideas for presentation: Contract Negotiation Approach/ASCE's Guide for the Engagement of Engineering Services; Differences between NMDOT Blue Book and COA Specs; Construction Safety; etc.
 - * Measure: Number of presentations made by the professional staff
- Reduce fuel consumption by 20% from 2005 level.
 - * Measure: Report quarterly fuel usage.

view decisions. Seminars and other technical information meetings will be utilized by staff to improve their effectiveness. Staff will seek to improve customer service in different ways, such as seeking to provide applicants of appropriate cases with a list of required improvements at the earliest time possible to assist in the determination of financial feasibility and the creation of public informational documents which address various Development Review concerns.

FY10

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 - * Measure: Number of presentations made by the professional staff.
- Reduce fuel consumption by 20% from 2005 level.

Technical Services Department-Development Review Program

* Measure: Report quarterly fuel usage. Conservation measures will be less effective for the Development Review program; however, the department goal of 20% reduction will still be tar-

geted. Department measurements and goals are provided in the 30RP/30LV program summary.

PERFORMANCE DATA:

Performance Measures	Actual FY 2006	Actual FY 2007	Estimated FY 2008	Target FY 2009	Target FY 2010
DR Inspections Completed – Based on % of targeted completion time compared to actual time	Excavation Inspections: 266%, Building Inspections: 176%	Excavation Inspections: 380%, Building Inspections: 186%	100/80	100/85	100/90
Development Reviews Completed – Based on % of targeted completion time compared to actual time	Building Permits: 166%, Grading and Drainage Plans: 118%, Construction Plans: 241%	Building Permits: 169%, Grading and Drainage Plans: 108%, Construction Plans: 257%	100/80	100/85	100/90
Number of presentations by professional staff	-*	-*	6	6	6

* Performance Measure was not being recorded.